

AMENDMENTS TO THE CLAIMS

1. (previously presented) A method for allocating bandwidth of a data network to a plurality of data streams, comprising:

specifying apportionment of the bandwidth to a plurality of data classes, wherein each class of the plurality of data classes corresponds to a node in a hierarchical policy tree;

receiving a plurality of data streams;

determining a particular data class that corresponds to a particular data stream;

wherein one or more other data streams that are associated with the particular data class are currently being transmitted;

determining a plurality of acceptable transfer rates for the particular data stream;

negotiating a transfer rate for the particular data stream from the plurality of acceptable transfer rates;

wherein negotiating a transfer rate for the particular data stream includes selecting a transfer rate that (a) does not exceed the bandwidth apportioned to the particular data class that is not being used by the one or more other data streams, and (b) does not cause the transfer rates of the one or more other data streams to go below minimum acceptable transfer rates of the one or more other data streams; and

transmitting the particular data stream on the data network at the negotiated transfer rate;

detecting termination of the particular data stream;

in response to detecting termination of the particular data stream, determining whether another data stream from said particular data class is able to use bandwidth that was allocated to said particular data stream;

in response to detecting that no data stream from said particular class is able to use bandwidth that was allocated to said particular data stream, performing the steps of

(a) selecting an existing data stream based, at least in part, on where the node that corresponds to the data class of the existing data stream is, within the hierarchical policy tree, relative to where the node of said particular class is, within said hierarchical policy tree; and

(b) increasing the bandwidth allocated to said existing data stream.